



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Bednarik et al.

Docket No.: PF138P1C1

Application No.: 09/902,705

Filed: July 12, 2001

Art Unit: 1652

For: Human Hypoxanthine-(Guanine)  
Phosphoribosyl Transferase-2

Examiner: Steadman, D.

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of the claims of the subject application. Attorneys for Applicants hereby direct the Examiner's attention to the references AA-BT listed on the attached Form PTO/SB/08.

Copies of references AA-BT were submitted by Applicants or cited by the Examiner in connection with U.S. Application Serial No. 08/461,031, filed June 5, 1995 and U.S. Application Serial No. 09/902,705 to which the instant application claims priority under 35 U.S.C. § 120. Pursuant to 37 C.F.R. § 1.98(d), the Examiner is directed to the files of U.S. Application Serial No. 08/461,031 and U.S. Application Serial No. 09/902,705 for copies of references AA-BT.

Identification of the listed references is not to be construed an admission of any individual associated with the filing or prosecution of the subject application that such references are available as "prior art" against the subject application. Furthermore, Applicants do not waive any rights to appropriate action to establish patentability over any of the listed documents should they be applied as references against the claims of the subject application.

Applicants respectfully request that the Examiner review the listed references and that the references be made of record in the file history of the application.

RECEIVED  
TECH CENTER  
SEP 21 2003

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

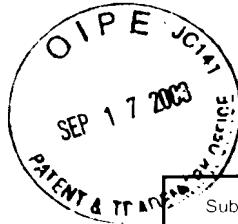
Since this Information Disclosure Statement is being submitted before the mailing date of the first Office Action on the merits, no fee is believed to be due. However, if the and Trademark Office determines otherwise, please charge the required fee to Human Genome Science, Inc., deposit account no. 08-3425.

Dated: September 17, 2003

Respectfully submitted,

By M. J. Hyman  
Mark J. Hyman

Registration No.: 46,789  
HUMAN GENOME SCIENCES, INC.  
9410 Key West Avenue  
Rockville, Maryland 20850  
(240) 314-1224



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
				Application Number	09/902,705-Conf. #8314
				Filing Date	July 12, 2001
				First Named Inventor	Daniel P. Bednarik
				Art Unit	1652
				Examiner Name	Steadman, D.
Sheet	1	of	2	Attorney Docket Number	PF138P1C1

<b>U.S. PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
AA	4,749,570		06-07-1988	POZNANKY et al.	
AB	5,108,921		04-28-1992	LOW et al.	
AC	US 09/912,292			ROSEN et al.	Pages 1-75 (pages 1 and 2 partially redacted); portion of Table 2; and SEQ ID NO:23842
AD	5,082,670		01-21-1992	GAGE et al.	
AE	5,118,601		06-02-1992	GRÜBER et al.	
AF	RE 34,387		09-21-1993	HOLMES et al.	

<b>FOREIGN PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			
AG	WO-94/17183		08-04-1994	BERGMANN et al.	
AH	WO-97/42320		11-13-1997	PAULAKIS et al.	

\*E KAMINER. Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

<b>NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
AI	OLSEN and MILMAN, "Chinese hamster hypoxanthine-guanine phosphoribosyltransferase," J. Biol. Chem., 249(13):4030-4037 (1974).				
AJ	Biochemistry by A.L. Lehninger, Published by Worth Publishers, Inc., 70 Fifth Ave., NY, NY 10011, PP. 109-122.				
AK	HARPER et al., "Review of Physiological Chemistry, 16th Edition," Lange Medical Publications, Los Altos, PP. 406-408.				
AL	BROWN, "Gene Therapy 'Oversold' by Researchers, Journalists," The Washington Post.				
AM	1990 Sigma Chemical Company Catalog, (Published by Sigma Chemical Company, P.O. Box 14508, St. Louis, Missouri), Page 1100.				
AN	OLARU et al., Revue Roumaine De Biochimie, Volume 18, Number 2, pages 131-137 (full document) (1981).				
AO	DAVIDSON et al., Purine and Pyrimidine Metabolism in Man VII, Part B (Published by Plenum Press, New York, New York) pages 1-5-108, (1991).				
AP	MILLER et al., "A transmissible retrovirus expressing human hypoxanthine phosphoribosyltransferase (HPRT): gene transfer into cells obtained from humans deficient in HPRT," Proc. Natl. Acad. Sci. USA, Aug; 80(15):4709-4713, (1983).				
AQ	PALELLA et al., "Expression of human HPRT mRNA in brains of mice infected with a recombinant herpes simplex virus-1 vector," Gene, 80(1):137-144, (1989).				
AR	ANDERSON W.F., "Prospects for human gene therapy," Science, 226:401-409 (1984).				

Examiner Signature	Date Considered
--------------------	-----------------



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/B/PTO				Complete if Known	
				Application Number	09/902,705-Conf. #8314
				Filing Date	July 12, 2001
				First Named Inventor	Daniel P. Bednarik
				Art Unit	1652
				Examiner Name	Steadman, D.
Sheet	2	of	2	Attorney Docket Number	PF138P1C1

AS	GHANGAS and MILMAN, "Radioimmune determination of hypoxanthine phosphoribosyltransferase crossreacting material in erythrocytes of Lesch-Nyhan patients," Proc. Natl. Acad. Sci. USA, 72(10):4147-4150, (1975).
AT	MELTON et al., "Structure, expression, and mutation of the hypoxanthine phosphoribosyltransferase gene," Proc. Natl. Acad. Sci. USA, 81:2147-2151 (1984).
AU	JOLLY et al., "Isolation and characterization of a full-length expressible cDNA for human hypoxanthine phosphoribosyl transferase," Proc. Natl. Acad. Sci. USA, 80:477-481, (1983).
AV	PATEL et al., "Organization of the HPRT gene and related sequences in the human genome," Somatic Cell and Molecular Genetics, 10(5):483-493 (1984).
AW	SCULLEY et al., "A review of the molecular basis of the hypoxanthine-guanine phosphoribosyltransferase (HPRT) deficiency," Hum. Genet., 90:195-207, (1992).
AX	YIP and BALIS, "Polyamine-polyphosphate complexes as enzyme inhibitors," Biochemistry, 19:1849-1856 (1980).
AY	YUAN et al., "Steady-state kinetics of the schistosomal hypoxanthine-guanine phosphoribosyltransferase," Biochemistry, 31:806-810, (1992).
AZ	WU and MELTON, "Production of a model for Lesch-Nyhan syndrome in hypoxanthine phosphoribosyltransferase-deficient mice," Nature Genetics, 3:235-240, (1993).
BA	Genbank Entry Accession No T00169 (1992).
BB	Genbank Entry Accession No T00115 (1992).
BC	Genbank Entry Accession No T23947 (1994).
BD	Genbank Entry Accession No T24112 (1994).
BE	Genbank Entry Accession No T24119 (1994).
BF	Genbank Entry Accession No T00696 (1992).
BG	Genbank Entry Accession No T11051 (1993).
BH	Genbank Entry Accession No T02687 (1993).
BI	Genbank Entry Accession No T00217 (1992).
BJ	Genbank Entry Accession No T00154 (1992).
BK	Genbank Entry Accession No Z47172 (1995).
BL	Genbank Entry Accession No L25928 (1993).
BM	Genbank Entry Accession No L26978 (1995).
BN	Genbank Entry Accession No A20700 (1994).
BO	Genbank Entry Accession No A20702 (1994).
BP	Genbank Entry Accession No I06859 (1994).
BQ	Genbank Entry Accession No L25927 (1993).
BR	HASSETT et al., "Characterization of cDNA clones encoding rabbit and human serum paraoxonase: the mature protein retains its signal sequence," Biochemistry, 30(42):10141-10149, (1991).
BS	ADKINS et al., "Molecular basis for the polymorphic forms of human serum paraoxonase/arylesterase: glutamine or arginine at position 191, for the respective A or B allozymes," Am. J. Hum. Genet., 52:598-608, (1993).
BT	JOHNSON et al., Biological Abstracts, 69(7):4678, (1980).

\*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

<sup>1</sup>Applicant's unique citation designation number (optional) <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached

Examiner Signature	Date Considered
--------------------	-----------------

RECEIVED  
SEP 23  
TECH CENTER 10